Application No. 09/831,757 Amdt. dated December 18, 2003 Reply to Office Action of July 29, 2003 Docket No. 2004-1018

## AMENDMENTS TO THE SPECIFICATION:

Please replace the Abstract of the Disclosure with the following rewritten Abstract which appears on a separate sheet.

Please add the following  $\underline{\text{new}}$  title before the paragraph beginning on line 3 of page 1:

--Background of the Invention--

Please replace the paragraph beginning at page 1, line 3, with the following rewritten paragraph:

--Nowadays, random diversity libraries are widely used to identify lead molecules for diagnostics, pharmaca and vaccins pharmaceuticals and vaccines. When the lead molecule is a peptide, the methods used for identifying the lead molecules are often referred to as pepscan methods.--

Please add the following  $\underline{\text{new}}$  title before the paragraph beginning on line 8 of page 2:

--Summary of the Invention--

Please add the following  $\underline{\text{new}}$  title before the paragraph beginning on line 17 of page 2:

--Detailed Description of the Invention--

Please replace the paragraph beginning at page 5, line 11, with the following rewritten paragraph:

--The next step of a method according to the invention is the determination of the activity of each test sequence of the library towards the receptor. The manner wherein this

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determination is carried out will depend on the specific interaction between mimotope sequence and receptor that is aimed at, and on the nature of the receptor and the building blocks of the mimotope sequence. For instance, when the desired activity is a binding of the mimotope sequence to the receptor, and the mimotope sequence is a peptide and the receptor is a monoclonal antibody, the determination may suitable be be suitably performed [[in]] by an ELISA test, either in solution or on a solid support. Other suitable methods of determining the activity include BIACORE (a research system for label-free studies of biomolecular binding) and AFM (Atomic Force Microscope). The skilled person will be able to choose a suitable manner of determination of the activity, given a certain receptor and nature of the mimotope sequence.—

Please replace the paragraph beginning at page 18, line 11, with the following rewritten paragraph:

--The peptide (SEQ ID NO: 3) EMDEEEDIMNYA: was run through a second replacement analysis. Again some replacements improve binding activity considerably. These replacements were used to design the improved peptide (SEQ ID NO: 4) EMDEEEDVPDYA. Essential is that the first part of (SEQ ID NO: 3) EMDEEEDIMNYA, (residues 1-6 of SEQ ID NO: 3) EMDEEE, does not contain critical residues whereas the latter part, (residues 7-12 of SEQ ID NO: 3) DIMNYA, does. Combination of the improved residues in this

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latter part results in the sequence (residues 1-6 residues 7-12 of SEQ ID NO: 4) DVPDYA. The sequence (residues 7-12 of SEQ ID NO: 4) DVPDYA is identical to the linear epitope of antibody 26/9. Thus, the lead peptide (SEQ ID NO: 2) CGCAAMNIRCYA derived from a few thousand random dodecapeptides was turned into native epitope sequence through two replacement analyses.—